



3 June 2009

Application Number 10/521,306
Art Unit: 1793

Examiner: Tima McGuthry-Banks

Dear M/s McGuthry-Banks

Further to your communication mailed on 17 April 2009, I submit the following response.

Claim Objections

Claim 1 step (vii) has been corrected as required.
Claim 1 step (viii) has been corrected as required
Claim 4 has been cancelled
Claim 14 has been cancelled

Response to Amendment

The applicant accepts that the marked-up copy and clean copy of the claims mailed on 9 January 2009 did not match and apologises for marking the errors.

The applicant notes that the Examiner used the mark-up copy for the office action.

Claim Rejections – 35 U.S.C. 112:

With reference to step (i) the applicant disagrees that “direct contact or gaseous intermediates within the layer of composite charge materials” is not in the disclosure as originally filed. The discussion in [0009] concerning the capillary rise effect occurring as a result of gas phase reactions within the porous structure to create newly formed metal is a vitally important mechanism for infiltration of hot metal as reduction proceeds as indicated in [0010] and is given the prominence that it justifiably demands in the description. Both direct contact with solid reductant as well as reduction by gaseous intermediates are the established mechanisms for the reduction of metal oxide. For example, in the iron blast furnace some reduction of iron ore occurs as a result of iron ore being in direct contact with carbon in the form of coke, whilst reduction with gaseous carbon monoxide also being acknowledged as a major contributor to the overall reduction process. In [0007] the chemical reactions are referred to as taking place within “a layer of composite charge material”.

Now referring to step (iii) of claim 1, which includes “a desulphurisation/decarburization zone”, this is referred to in [0038] in association with Fig. 1.

The criticism that the subject matter, which the applicant regards as the invention not having sufficient antecedent basis will now be dealt with to show that this is an erroneous assessment of material dealt with at considerable length and appropriate detail to ensure that those skilled in the art are provided with the necessary information in relation to claim 1. Comprehensive coverage is presented in the description for all the cases cited in relation to claim 1 as will now be outlined in the following paragraphs. Comments by the Examiner in relation to claim 5, claim 11, claim 12 and claim 15 are accepted by the applicant and appropriate corrections are incorporated in the marked-up copy of amended claims.